history suggestive of syphilitic infection, and if subsequent tests are negative or doubtful the marriage certificate should be signed.

What should be done when the serological test is positive?

Repeat the test. One positive test should not be considered sufficient to establish a diagnosis in the absence of clinical evidence of syphilis. (See Diagnosis of Syphilis by the General Practitioner, Supplement No. 5, to Venereal Disease Information. Copies obtainable from the California State Department of Public Health.)

Which factors should be considered in certifying a syphilitic person for marriage?

The danger of the patient infecting the marital partner is the only factor you are required by law to consider.

When should a syphilitic patient be allowed to marry?

Two matters should be considered in deciding the probability of a patient transmitting syphilis to the marital partner. They are duration of infection and thoroughness of treatment. The Wassermann reaction is not an index of infectiousness.

Infectiousness decreases with time. A person who has had syphilis for five years, treated or not, and regardless of whether the serological test is positive or negative, is considered, for practical purposes, noninfectious to the marital partner by most authorities and may be permitted to marry. However, there are rare cases in which infections are transmitted after five years. Persons with syphilis of long standing who have been inadequately treated should be advised that there is a possibility they may transmit the disease and urged to take a minimum of six months' continuous treatment before marriage. For such patients, treatment should be continued after marriage until the physician considers that an adequate course has been given.

Any patient with infection of less than five years' duration should be required to fulfill the following criteria: twelve to eighteen months of continuous treatment with alternating courses of an approved arsenical and heavy metal during the last year of which the patient has been seronegative. This course of treatment should be followed by a minimum of one year of probation in which the patient remains free of clinical and serological evidence of syphilis.

Any patient whose infection is of unknown duration should fulfill the same requirements as a case under five years' duration except that the Wassermann reversal is less essential.

Physicians should recognize that even the fulfillment of these requirements is not absolute proof against transmission of infection. They constitute a reasonable safeguard. A rare case may transmit infection and patients should be so advised. If they agree to take this remaining remote risk, the certificate should be issued.

If the early infection and treatment are complicated by such features as asymptomatic neurosyphilis, arsphenamin resistance, or Wassermann-fastness, marriage should be deferred until the patient has completed treatment and five years is known to have elapsed from date of infection.

The criteria recommended for issuing a certificate to a syphilitic, therefore, are as follows:

- 1. A person who has had syphilis for more than five years and has not received adequate treatment may be permitted to marry, but in such cases a minimum of six months' continuous treatment before marriage is advised.
- 2. A person who has had syphilis less than five years should be given a minimum of twelve to eighteen months of continuous treatment, during the last year of which the patient is seronegative, to be followed by a year of probation during which the patient remains free of clinical and serological evidence of syphilis.
- 3. A person who has had syphilis of unknown duration should fulfill the same requirements as those outlined in

paragraph 2 except that Wassermann reversal is less essential.

Other Factors the Physician Should Consider

The danger of transmitting syphilis to the marital partner is the only matter the physician is required by law to consider in certifying a person for marriage. Good medical practice, however, requires that two other factors should also be considered: (1) the danger of transmission of syphilis to the unborn child; (2) the danger that syphilis may incapacitate the patient and shorten life, thereby adding to the economic hazards of marriage.

What is the danger of transmission of infection to the unborn child?

There is no danger that the fetus will be infected by the father if the mother does not become infected. If the mother is infected and untreated, there are approximately seven chances in eight for infection of the fetus. If the mother is adequately treated during pregnancy, beginning before the fifth month, there are at least ten chances in eleven that the child will be nonsyphilitic. Nearly absolute safety for the child may be obtained: (1) if the mother is adequately treated before pregnancy; (2) if, regardless of her own status at the time of pregnancy, she is treated continuously throughout the duration of each pregnancy.

How much weight should be given to the danger of incapacity or death from syphilis?

"The danger of incapacity or death from syphilis is a real one. . . . It is manifestly unfair for the syphilitic patient to expect his fiancée to accept this risk blindfold. If the patient's life is shortened or if, after marriage and the birth of several children, he becomes a bedridden invalid from cardiovascular or neurosyphilis, an economic tragedy may be precipitated. Marriage is a partnership, the hazards as well as the pleasures of which should be faced by both partners equally. For this reason, if for no other, no person who has acquired syphilis should contemplate marriage without a frank disclosure to his fiancée of the fact that he has had syphilis; and this announcement should be supplemented by a conference between his fiancée and physician, in which the possibilities of the future are frankly set forth. Many factors require consideration, i. e., the earning capacity of the husband, his protection of life insurance, the ability of the wife to earn her own living if necessary, the possibility of financial security and insecurity. If the danger of infection is eliminated, and if the fiancée chooses to take the economic risk after full explanation, the physician need not object, even though his patient has tabes, paresis, or aneurysm."*

As far as the California law is concerned, the strictly legal obligation of the physician is clear. He need only concern himself with the question of whether the applicant for a license has syphilis which is, or may become, communicable to the marital partner. Consideration of the health and economic outlook for the patient are not legal reasons for refusing to sign a certificate.

PRENATAL LAW†

Prenatal Tests for Syphilis Suggestions to Physicians

Prenatal serological tests for syphilis are required on and after September 19, 1939, by Chapter 127, Acts of 1939. The law requires that every licensed physician and surgeon or any other person engaged in prenatal care of a pregnant woman, or attending such a woman at the time of delivery, shall take or shall have taken a blood specimen at the time of the first visit or within ten days thereafter.

^{*} From Moore's Modern Treatment of Syphilis. Courtesy of Charles C. Thomas, Publisher, Springfield, Illinois.

[†] From the California State Department of Public Health.

The blood specimen thus obtained shall be submitted to an approved laboratory for a standard serological test for syphilis. The law provides:

"Any licensed physician and surgeon, or other person engaged in attendance upon a pregnant woman or a recently delivered woman, or any representative of a laboratory who violates the provisions of this Act shall be guilty of a misdemeanor; provided, however, every licensed physician and surgeon or other person engaged in attendance upon a pregnant or recently delivered woman, who requests such specimen in accordance with the provisions of Section 1, and whose request is refused, shall not be guilty of a misdemeanor."

Change in Birth Certificate

A question was added to the birth certificate by a law known as Chapter 385, Acts of 1939; Section 10200 of the Health and Safety Code. The new question follows:

"(29) Prenatal examination for syphilis, including period of gestation in months or weeks at which examination was made, and if examination was not made, including reason for not making such examination; provided, however, that the result of said examination be not included on said certificate nor made public in any manner."

Administration of the Law

The only departures from the usual routine of the physician are:

- 1. In submitting the specimen to the laboratory, he must designate that this is a prenatal test.
- 2. He must report the full name and complete address of the patient to the laboratory.
- 3. He must record on the birth certificate the fact that a serological test was made,

The laboratory makes its report to the physician on the original copy of a special form provided by the California State Department of Public Health. The duplicate is sent to the state health department. The triplicate is retained on file by the laboratory.

Since birth certificate forms are now in the process of being changed, upon recommendation of the United States Bureau of the Census, it will be some months before the new forms with this question added can be supplied.

Syphilis in Pregnancy

What shall be done if the test is negative but there is a history of syphilis?

If the patient has ever had a diagnosis of syphilis, with or without previous treatment, she should be treated throughout each pregnancy although the serology is negative. Rare exceptions to this rule are recognized.

What shall be done when the report on the test is doubtful?

Repeat the test. Study the case until a definite decision can be made. Do not alarm the patient, but advise her that the question is of such importance that guesswork is not permissible. In doubtful tests made by a local laboratory, the state laboratory is required to accept specimens for checking purposes.

What is the procedure if the test is positive?

If the test is positive and confirmed by a second examination, or if there is a history of previous infection, start treatment at once. The aim of antisyphilitic therapy in pregnancy is to prevent or cure syphilis in the child. The disease in the mother should be disregarded temporarily. There is time enough to treat her later, but there are only a few months for treatment of the infant in utero. Special treatment of the mother for neurosyphilis and other complications can wait until the end of the pregnancy.

How much treatment should be given?

Treatment should be planned according to the period of time remaining in pregnancy. Always end treatment of pregnancy with neoarsphenamin or mapharsen. For young adult women otherwise in good physical condition, treatment may be begun with neoarsphenamin or mapharsen. In patients with long-standing syphilitic infection, it is best to give two to four preliminary injections of bismuth salicylate 0.2 gram each.

The following is an acceptable treatment plan for a young adult mother two months pregnant:

Week Drug

First 0.45 gram neoarsphenamin or 0.04 gram mapharsen

2nd to 6th, inclusive 0.6 gram neoarsphenamin or 0.06 gram mapharsen

7th to 12th, inclusive 0.2 gram bismuth salicylate 13th to 18th, inclusive 0.6 gram neoarsphenamin or 0.06

19th to 22nd, inclusive 0.2 gram mapharsen 0.2 gram bismuth salicylate 0.6 gram neoarsphenamin or 0.06 gram mapharsen

This plan of treatment must be modified to meet conditions of individual pregnancy.

If treatment is started as late as the seventh month of pregnancy, neoarsphenamin and bismuth should be given each week to the end of pregnancy. If treatment is started as late as the ninth month, bismuth plus an arsenical should be given at intervals of four or five days.

Tryparsamid, because of its low spirochaeticidal activity, cannot be substituted for the trivalent arsenicals.

Congenital Syphilis

How shall a diagnosis be established in the infant?

There are two chief factors to be considered: the serological test, and the clinical manifestations.

The serological test in the infant may be positive at birth, due either to syphilitic infection or a transfer of reagin from the mother. A positive cord Wassermann, therefore, is not a reliable criterion of infection. In the absence of clinical evidence of infection, it is necessary to follow the serology of the infant for at least three months before a diagnosis can safely be made.

The recommended procedure is to test at one month and then at intervals of two weeks. If the test is still positive after three months, begin treatment even in the absence of clinical manifestations. If the test is negative, repeat the test from two to four times during the first two years.

Since the infant may develop clinical signs of syphilis during the observation period, weekly examination is necessary. If clinical evidence of syphilis appears, begin treatment immediately. This treatment consists of intramuscular injections with bismarsen or another recognized antisyphilitic drug.

What treatment should be given an infant?

The following schedule of treatment for congenital syphilis has been found highly effective. The same schedule may be used in the treatment of acquired syphilis of childhood.

UNDER ONE YEAR OF AGE

1 injection 0.05 gram bismarsen

39 injections 0.1 gram bismarsen

Injections given intramuscularly in the buttocks one time per week or two times per week.

One month vacation.

Take Wassermann.

Give one course (forty injections) after first negative Wassermann.

If Wassermann-fast, six such courses is maximum given.

OVER ONE YEAR OF AGE

1 injection 0.1 gram bismarsen

39 injections 0.2 gram bismarsen

Wassermann tests and courses as above,

If patient is sensitive to bismarsen, give forty injections of 0.1 gram of potassium bismuth tartrate.

About every sixth injection try bismarsen, 0.05 gram.

OLDER CHILDREN AND ADOLESCENTS

Adult treatment preferable or 1 injection 0.1 gram bismarsen 4 injections 0.2 gram bismarsen 35 injections 0.3 gram bismarsen Wassermann tests and courses as above.

PROPOSED CHIROPRACTIC INITIATIVE LAW*

Explanatory Note.—This proposed Chiropractic Initiative law is an initiative which aims to amend the existing Chiropractic Practice Act, enacted in 1922.

The complete text of the initiative to be voted upon this fall (on November 7, 1939) is appended, special attention being called to the portions that are emphasized with blackface type.

1 1 1 (COPY)

Initiative Measure to Be Submitted Directly to the Electors

The Attorney-General has prepared a title and summary of the chief purposes and points of said proposed measure, as follows:

Chiropractors. Initiative. Amends title and certain sections of Chiropractic Act; provides secretary of Chiropractic Board shall devote full time to duties and increases his salary; increases powers of board; increases educational requirements of applicant for license; permits licensees to diagnose and treat diseases, injuries, deformities or other physical or mental conditions of human beings, without using drugs or severing any tissues of human body; specifies grounds of and proceedings for suspension or revocation of license; specifies annual renewal license fee and method of reinstating forfeited license; declares licensees shall report communicable diseases and sign birth and death certificates.

State of California, County (or City and County) of,—ss.

To the Honorable, the Secretary of State of the State of California:

We, the undersigned, registered, qualified electors of the State of California, residents of the county (or city and -, hereby present to the Secretary of State county) of this petition and hereby propose a law and act entitled as follows: "An act to amend the title and Sections 3, 4, 5, 7, 10, 12 and 13 of that certain act entitled 'An act prescribing the terms upon which licenses may be issued to practitioners of chiropractic, creating the state board of chiro-practic examiners and declaring its powers and duties, prescribing penalties for violation hereof, and repealing all acts and parts of acts inconsistent herewith," approved by the electors at the general election on November 7, 1922; providing for the organization of the state board of chiropractic examiners, and providing for its officers, duties, powers and compensation; regulating the practice and licensing of chiropractors; defining the scope of practice of licensees: establishing educational requirements and other qualifications for licensees; fixing license and renewal fees; providing for the issuance, suspension, revocation and reinstatement of licenses; providing for investigation and approval of chiropractic schools and colleges; requiring reports of communicable diseases; and repealing all conflicting provisions of other acts, to read as hereinafter set forth in full, and petition that the same be submitted to the electors of the State of California for their adoption or rejection at the next succeeding general election or as provided by law.

The proposed law and act is as follows:

An act to amend the title and sections 3, 4, 5, 7, 10, 12 and 13 of that certain act entitled "An act prescribing the terms upon which licenses may be issued to practitioners of chiropractic, creating the state board of chiropractic examiners and declaring its powers and duties, prescribing penalties for violation hereof, and repealing all acts and parts of acts inconsistent herewith," approved by the electors at the general election on November 7, 1922; providing for the organization of the state board of chiropractic examiners and providing for its officers, duties, powers and compensation; regulating the practice and licensing of chiropractors; refining the scope of practice of licensees;

fixing license and renewal fees; providing for the issuance, suspension, revocation and reinstatement of licenses; providing for investigation and approval of chiropractic schools and colleges; requiring reports of communicable diseases; and repealing all conflicting provisions of other acts.

The people of the State of California do enact as follows:

Section 1. The title of that certain act entitled "An act prescribing the terms upon which licenses may be issued to practitioners of chiropractic, creating the state board of chiropractic examiners and declaring its powers and duties, prescribing penalties for violation hereof, and repealing all acts and parts of acts inconsistent herewith," approved by the electors at the general election on November 7, 1922, is hereby amended to read as follows:

"An act creating the state board of chiropractic examiners, and providing for its organization, members, duties and powers; regulating the practice and licensing of chiropractors and defining the scope of practice thereof; providing for the investigation and approval of chiropractic schools and colleges; establishing educational requirements and other qualifications for licensees; fixing license fees; providing for the issuance, suspension, revocation and reinstatement of licenses; prescribing penalties for violation hereof, and repealing all conflicting provisions of other acts."

Section 2. Section 3 of said act is hereby amended to read as follows:

Sec. 3. The board shall convene within thirty days after the appointment of its members, and shall organize by the election of a president, vice-president and secretary, all to be chosen from the members of the board. Thereafter elections of officers shall occur annually at the January meeting of the board. A majority of the board shall constitute a quorum.

It shall require the affirmative vote of three members of said board to carry any motion or resolution, to adopt any rule, or to authorize the issuance of any license provided for in this act.

The secretary shall receive a salary to be fixed by the board in an amount not less than three thousand six hundred dollars per annum and not more than four thousand two hundred dollars per annum, together with his actual and necessary traveling expenses incurred in connection with the performance of the duties of his office, and shall give bond to the state in such sum with such sureties as the board may deem proper. He shall devote his full time to the performance of his duties as such secretary. He shall keep a record of the proceedings of the board, which shall at all times during business hours be open to the public for inspection. He shall keep a true and accurate account of all funds received and of all expenditures incurred or authorized by the board, and on the first day of December of each year he shall file with the governor a report of all receipts and disbursements and of the proceedings of the board for the preceding fiscal year.

Section 3. Section 4 of said act is hereby amended to read as follows:

Sec. 4. The board shall have power:

(a) To adopt a seal, which shall be affixed to all licenses issued by the board.

(b) To adopt from time to time such rules and regulations as the board may deem proper and necessary for the enforcement of this act, copies of such rules and regulations to be filed with the secretary of the board for public inspection.

(c) To examine applicants and to issue and revoke licenses to practice chiropractic, as herein provided.

(d) To summon witnesses and to take testimony as to matters pertaining to its duties; and each member shall have power to administer oaths and take affidavits in connection with board matters.

(e) To approve every chiropractic school or college which complies with the provisions of this act and the rules and regulations of the board. Nothing in this act shall prohibit the board from withdrawing its approval of any chiropractic school or college after such approval has been granted.

(f) To promulgate and adopt rules and regulations for the conduct of chiropractic schools and colleges. Each chiropractic school or college in order to obtain the approval of the board shall make application therefor to the board in writing, and shall furnish such information regarding such school or college as may be required by the board. Said schools or colleges shall at all reasonable times permit any member of the board or any representative thereof to enter upon the premises of such school or college and to inspect the facilities and records thereof.

(g) To publish an annual directory, a copy of which shall be delivered to each licentiate without cost. Copies of said directory may be sold to other persons at one dollar per copy.

^{*} For editorial comment, see page 147.
For digest of an opinion on the existing chiropractic law, see on page 213.